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ALSTON & BIRD LLP		SALIARD, SHANNON S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/635,273	HARTMANN ET AL.
	Examiner	Art Unit	
	Shannon S. Saliard	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08/06/03</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-89</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-89</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>06 August 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>10/27/03, 10/20/03</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Drawings

1.   The drawings filed on 6 August 2003 are acceptable subject to correction of the

informalities indicated on the attached "Notice of Draftsperson's Patent Drawing

Review," PTO-948. In order to avoid abandonment of this application, correction is

required in reply to the Office action. The correction will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.   **Claims 1, 4-6, 8, 14, 16-20, 22-24, 26, 27, 29-31, 33, 34, 36, 37, 39-43, 45, 47-**

52, 65, 67, 69-74, 76-81, 84-86, and 88 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

Claims 1, 15, 20, 31, 65, 73, and 80, recite the limitation "the selected product".

There is insufficient antecedent basis for this limitation in the claim.

As per **claims 4, 22, 33, 41, 47, 50, 73, and 80**, the limitation "a product may be

used on different start dates" as recited is vague and indefinite.

Claims 4-6, 22-24, 33, 34, 41-43, and 47-52, recite the limitation "start dates of

use". There is insufficient antecedent basis for this limitation in the claim.

As per **claims 5, 23, 42, 48, and 51**, the limitation "determines which start dates of use to update the availability information in the storage device for by using a decaying exponential function" as recited is vague and indefinite.

As per **claims 8, 14, 26, 36, 45**, the limitation "the product can be used on a particular start date" as recited is vague and indefinite.

Claims 16, 27, 37, 67, 74, and 81 recite the limitation "the maximum length of use." There is insufficient antecedent basis for this limitation in the claim.

Claims 16-19, 27, 29, 30, 37, 39, 40, 67, 69, 70, 74, 76, 77, 81, 84, and 85 recite the limitation "the dates covered by the requested start date". There is insufficient antecedent basis for this limitation in the claim.

As per **claims 16, 27, 37, 67, 74, and 81**, the limitation "wherein when the length of use for a product exceeds the maximum length of use" is vague and indefinite. The limitation as recited is conditional. It is unclear to the Office what happens when the length of use does not exceed the maximum length of use.

Claims 18, 29, 39, 69, 76, and 84 recite the limitation "the maximum length of stay". There is insufficient antecedent basis for this limitation in the claim.

As per **claims 19, 30, 40, 70, 77, and 85**, the function as recited in the claim limitation is vague and indefinite. The applicant appears to define "X" in the claim; however, "x" is used in the mathematical equation. The definition of "x" is unclear to the Office.

As per **claims 71 and 78**, the limitation "the storing stay may determine which of the shorter lengths of use can be derived from the maximum lengths of use" as recited is vague and indefinite.

As per **claims 72 and 79**, the limitation "a first length of use is substantially equal to a price associated with the maximum length of use" as recited is vague and indefinite. Moreover, the limitation "wherein if a price associated with a first shorter length of use" is vague and indefinite. The limitation as recited is conditional. It is unclear to the Office what happens if a price associated with a first shorter length if use is not substantially equal to a price associated with the maximum length of use.

As per **claims 86 and 88**, the limitation "accumulating the number of times that a product source's product related to an availability request and the number of times that the product source had availability for the requested product" as recited is vague and indefinite. It is unclear to the Office what the applicant is attempting to set forth.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   **Claims 1-4, 8, 9, 20-22, 31-33, 41, 45-47, and 50** are rejected under 35

U.S.C. 102(e) as being anticipated by Fay et al [US 2003/0187851].

As per **claims 1, 20, and 31**, Fay et al discloses a method for providing product

availability information to a user from at least one product source, said method

comprising: accessing at least one product source and requesting product availability

information concerning at least one product prior to receipt of a product availability

request from a user concerning the product; storing the product availability information

received from the product source in a storage device; receiving a product availability

request from a user concerning a product; accessing the information prestored in the

storage device for the selected product; and determining the availability of the product

based on at least the availability information prestored in the storage device [0018].

As per **claim 2**, Fay et al further discloses wherein said accessing and storing

steps access a plurality of product sources, requests product availability information

concerning at least one product, and store the product availability information for the at

least one product from each product source in the storage device [0017].

As per **claims 3, 21, and 32**, Fay et al further discloses further comprising

updating the product availability information stored in the storage device by accessing

the product sources, requesting availability information about the product, and storing

the product availability information in the storage device [0027].

As per **claims 4, 22, and 33**, Fay et al further discloses wherein a product may

be used on different start dates for different lengths of time, wherein said storing step

stores availability information for each start date and each length of time associated with

each start date [0037], said method further comprising: updating availability information in the storage device for start dates of use that occur sooner in time than for start dates of use that occur later in time [0048].

As per **claims 8 and 45**, Fay et al further discloses wherein the product can be used on a particular start date of use for different lengths of use, wherein for each length of use for each start date said accessing and storing steps access product sources, requests availability information concerning the product for the particular start date of use and length of use, and stores the availability information in the storage device [0037].

As per **claims 9 and 46**, Fay et al further discloses further comprising updating availability information in the storage device more often for start dates that occur sooner in time than for start dates that occur later in time, wherein for each start date, said updating step updates the product availability information for each length of use associated with the start date [0044].

As per **claims 41, 47, and 50**, Fay et al discloses a method for providing product availability information to a user from at least one product source, where a product may be used on different start dates, said method comprising: accessing at least one product source and requesting product availability information concerning at least one product for different start dates of use prior to receipt of a product availability request from a user concerning the product; storing the product availability information received from the product source in a storage device; determining the availability of a requested product by a user based on at least the availability information prestored in the storage

device [0018]; and updating availability information in the storage device for start dates

of use of the product that occur sooner in time than for start dates of use that occur later

in time [0048].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 5-7, 23, 24, 34, 42-44, 48, 49, 51, and 52** are rejected under 35 U.S.C.

103(a) as being unpatentable over Fay et al [US 2003/0187851] in view of Bonneau et

al [U.S. Patent No. 6,657,955].

As per **claims 5, 23, 42, 48, and 51**, Fay et al discloses all the limitations of

claims 1 and 4. Fay et al further discloses wherein said updating step determines which

start dates of use to update the availability information in the storage device for by using

a decaying exponential function to define the start dates to be updated, such that start

dates of use that occur sooner in time are updated more often than start dates of use

that occur later in time [0047-0048]. Fay et al fails to disclose wherein a decaying

exponential function is used to determine the start dates to update. However, Bonneau

et al discloses a decaying exponential function is used to determine the pre-stored

information to update in a storage device [col 3, lines 62-67]. Therefore, it would have

been obvious to one of ordinary skill in the art at the time of the invention to modify the

invention of Fay et al to include the method disclosed by Bonneau et al to avoid

providing stale information from the storage device to the user. Bonneau et al also

provides the motivation that updating the records in the storage device prevents the

storage device from reaching its full occupancy level.

As per **claims 6, 7, 24, 34, 43, 44, 49, and 52**, Fay et al discloses wherein said

updating step determines which start dates of use to update the availability information

for in the storage device [0047-0048]. Fay et al fails to disclose wherein determining the

start dates to update include using the function: Start Date=N $^{(log\ day/log\ length)}$ where Start

Date=date to be queried N=integer number (0, 1, 2, 3, . . . Day) Day=maximum number

of days out to be queried Length=maximum number of days that can be returned in a

query list and wherein said function generates a list of numbers, wherein said method

further comprises adding each number in the list to said current date to determine the

product availability for which start dates should be updated by said updating step in the

storage device. However, Bonneau et al discloses that logarithmic functions can be

used to determine the information that needs to be updated in a storage device [col 3,

lines 62-67; col 12, lines 16-22]. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to modify the invention of Fay et al to

include the method disclosed by Bonneau et al to avoid providing stale information from

the storage device to the user. Bonneau et al also provides the motivation that updating

the records in the storage device prevents the storage device from reaching its full

occupancy level.

5.   **Claims 10-13, 25, 35, and 53-64** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Fay et al [US 2003/0187851] in view of McKeeth [US 2003/0105744].

As per **claims 10, 25, and 35**, Fay et al discloses all the limitations of claims 1

and 3. Fay et al further discloses wherein the storage device comprises product

availability information from a plurality of product sources [0016]. Fay et al fails to

disclose wherein said method further comprises providing a score for each product

source based at least on a popularity of the product source, and said updating step

comprises updating the availability information stored in the storage device for each

product source based on the score associated with each product source. However,

McKeeth discloses a method for updating and scoring data based on popularity [0022;

0027]. Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to modify the invention of Fay et al to include the method disclosed

by McKeeth. McKeeth provides the motivation that the method would overcome the

problem of stale information in a database by improving the freshness of the contents in

the database.

As per **claims 11, 54, 58, and 62**, Fay et al fails to disclose wherein said

updating step updates product availability for product sources having higher scores

more than product sources having lower scores. However, McKeeth discloses that

information associated with a source having a higher popularity rating is updated more

often than information having a lower popularity rating [0042]. Therefore, it would have

been obvious to one of ordinary skill in the art at the time of the invention to modify the

invention of Fay et al to include the method disclosed by McKeeth. McKeeth provides

the motivation that it is easier to manage vast amounts of data stored in the database

by using a method to decide which resources should be updated first and when.

As per **claims 12, 55, 59, and 63,** Fay et al fails to disclose wherein said

updating step performs a selected number of updates of product source information for

a given update session, said updating step assigns more updates to product sources

having higher scores than to product sources having lower scores. However, McKeeth

discloses that a predetermined number of updates are performed in an update session

and that data having higher scores are updated more frequently (0042; lines 30-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the invention of Fay et al to include the method disclosed by

McKeeth. McKeeth provides the motivation that it is easier to manage vast amounts of

data stored in the database by using a method to decide which resources should be

updated first and when.

As per **claims 13, 56, 60, and 64,** Fay et al fails to disclose wherein a minimum

number of updates are performed on each product source independent of the product

source's associated score. However, McKeeth discloses that a minimum number of

updates in performed on the information stored in the storage device regardless of a

popularity score [0044]. Therefore, it would have been obvious to one of ordinary skill in

the art at the time of the invention to modify the invention of Fay et al to include the

method disclosed by McKeeth to provide information that has a better probability of

being accurate when the user requests the information.

As per **claims 53, 57, and 61**, Fay et al discloses a method for providing product
availability information to a user from at least two product sources, said method
comprising: accessing the at least two product sources and requesting product
availability information concerning at least one product prior to receipt of a product
availability request from a user concerning the product; storing the product availability
information received from the product sources in a storage device; determining the
availability of a requested product by a user based on at least the availability information
prestored in the storage device [0018]. Fay et al fails to disclose providing a score for
each product source based at least on a popularity of the product source; and updating
the availability information stored in the storage device for each product source based
on the score associated with each product source. However, McKeeth discloses a
method for updating and scoring data based on popularity [0022; 0027]. Therefore, it
would have been obvious to one of ordinary skill in the art at the time of the invention to
modify the invention of Fay et al to include the method disclosed by McKeeth. McKeeth
provides the motivation that the method would overcome the problem of stale
information in a database by improving the freshness of the contents in the database.

6.   **Claims 14, 15, 26, 36, 65, 66, 73, 80, and 81** are rejected under 35 U.S.C.
103(a) as being unpatentable over Fay et al [US 2003/0187851].

As per **claims 14, 26, 36**, Fay et al discloses wherein the product can be used on
a particular start date and for different lengths of use from the start date [0037]. Fay et
al fails to explicitly disclose wherein said storing step only stores product availability

information for a maximum number of lengths of use for each start date. However, Fay et al discloses that product availability information is only stored for a maximum day range from the current date [0047]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Fay et al to include only storing product availability information for a maximum number of lengths of use for each start date to control the number of records stored in the database.

As per **claims 15, 66, and 81**, Fay et al further discloses wherein said receiving, accessing, and determining steps comprise: receiving an availability request from a user concerning a product for a given start date and length of use; accessing the information prestored in the storage device for the selected product; and determining the availability of the product based on the selected start date and length of use from the availability information prestored in the storage device [0037].

As per **claims 65, 73, and 80**, Fay et al discloses a method for providing product availability information to a user from at least one product source, where a product may be used on different start dates and for different lengths of use from the start date, said method comprising: accessing at least one product source and requesting product availability information concerning at least one product prior to receipt of a product availability request from a user concerning the product; storing the product availability information received from the product source in a storage device; receiving a product availability request from a user concerning a product; accessing the information prestored in the storage device for the selected product; and determining the availability of the product based on at least the availability information prestored in the storage

device [0018; 0037]. Fay et al fails to explicitly disclose wherein said storing step only

stores product availability information for a maximum number of lengths of use for each

start date. However, Fay et al discloses that product availability information is only

stored for a maximum day range from the current date [0047]. Therefore, it would have

been obvious to one of ordinary skill in the art at the time of the invention to modify the

invention of Fay et al to include only storing product availability information for a

maximum number of lengths of use for each start date to control the number of records

stored in the database.

7.   **Claims 16-19, 27-30, 37-40, 67-70, 74-77, and 82-85** are rejected under 35

U.S.C. 103(a) as being unpatentable over Fay et al [US 2003/0187851] in view of

DeMarcken [US 2004/0078251].

As per **claims 16, 27, 37, 67, 74, and 82**, Fay et al discloses all the limitations of

claims 1, 14, and 15. Fay et al fails to disclose wherein when the length of use for a

product exceeds the maximum length of use stored in the storage device, said

determining step comprises: dividing the length of use requested by the user into at

least two selected start dates and lengths of use that are each less than the maximum

length of use stored in the storage device, and have start dates and lengths of use that

collectively correspond to the dates covered by the requested start date and length of

use; and determining the availability of the product for each selected start date and

length of use to thereby determine the availability of the product for the requested start

date and length of use. However, DeMarcken discloses dividing the request of a user

into at least two selected start dates and lengths of use to determine the availability of a product [0019]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Fay et al to include the method disclosed by DeMarcken. DeMarcken provides the motivation that dividing the query into multiple queries help to achieve the goal to reduce query latency.

As per **claims 17, 28, 38, 68, 75, and 83**, Fay et al fails to disclose wherein said dividing step divides the requested start date and length of use into at least two selected start dates and lengths of use, wherein each selected length of use covers at least two dates. However, DeMarcken discloses that the requested start date and length of use are divided into at least two start dates that cover at least two dates [0025]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Fay et al to include the method disclosed by DeMarcken. DeMarcken provides the motivation that dividing the query into multiple queries help to achieve the goal to reduce query latency.

As per **claims 18, 29, 39, 69, 76, and 84**, Fay et al fails to disclose wherein said dividing step creates at least two scenarios, wherein each scenarios includes a set of selected start dates and lengths of use that are each less than the maximum length of say, and have start dates and lengths of use that collectively correspond to the dates covered by the requested start date and length of use, and wherein at least one of the start dates of one scenario is different from the start date of the other scenario. However, DeMarcken discloses that the dividing includes dividing the start date and length of use into at least two scenarios correspond to the requested start date [0025].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Fay et al to include the method disclosed by DeMarcken. DeMarcken provides the motivation that dividing the query into multiple queries help to achieve the goal to reduce query latency.

As per **claims 19, 30, 40, 70, 77, and 85**, DeMarcken fails to explicitly disclose wherein said dividing step creates at least two scenarios, wherein each scenario includes a set of selected start dates and lengths of use that are each less than the maximum length of use, and have start dates and lengths of use that collectively correspond to the dates covered by the requested start date and length of use, said dividing step using the following function to create the scenarios: 1) If LOS modulo X=0 where LOS=length of use of request X=maximum length of use stored in the cache Then 5 Scenario 1 : A , B , C A = x / 2 B = 1 int (LOS - (x / 2)) / x x C = LOS - (A + B) Scenario 2 : = 1 int (LOS / x) x 2) If LOS modulo X>0 Then 6 Scenario 1 : A , B , C A = (x - 1) B = 1 int (LOS - A) / x x C = LOS - (A + B) Scenario 2 : C , B , A. However, DeMarcken discloses that a query is divided into subqueries based on a criterion and/ or algorithm to determine the best division of the time range based on user input [0034]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Fay et al and DeMarcken to include using any function to optimally determine how to divide the requested query dates.

As per **claims 71 and 78**, Fay et al discloses wherein for each start date there are a maximum length of use and different shorter lengths of use [0047]. Fay et al fails to disclose wherein said storing step may determine which of the shorter lengths of use

can be derived from the maximum lengths of use and thereby only stores in the storage

device availability information for the maximum length of use and the shorter lengths of

use that are derivable from the maximum length of use. However, DeMarcken

discloses a system that determines and stores a shorter length of use that is derived

from a maximum length of use [0025]. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to modify the invention of Fay et al to

include the method disclosed by DeMarcken to enable the queries to be divided into

subqueries so that space in the storage device can be maximized and response latency

be minimized.

As per **claims 72 and 79**, DeMarcken fails to explicitly disclose wherein if a price

associated with a first shorter length of use is substantially equal to a price associated

with the maximum length of use, then said storing step determines that the first shorter

length of use is derivable from the maximum length of use. However, it would have

been obvious to one of ordinary skill in the art at the time of the invention to use the

price to determine a shorter length of use that would be offered in response to a request

instead of the requested length of use. This allows the customer to not be offered

exuberant prices in order to meet their availability requirements.

8.   **Claims 86-89** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Fay et al [US 2003/0187851] in view of Megiddo et al [us 2004/0098541].

As per **claims 86 and 88**, Fay et al discloses a method for providing product

availability information to a user from at least two product sources, said method

comprising: accessing the at least two product sources and requesting product

availability information concerning at least one product prior to receipt of a product

availability request from a user concerning the product; storing the product availability

information received from the product sources in a storage device; determining the

availability of a requested product by a user based on at least the availability information

prestored in the storage device; providing the user with availability information

concerning the product from each product source. Fay et al fails to disclose

accumulating the number of times that a product source's product relates to an

availability request and the number of times that the product source had availability for

the requested product; dividing the number of times that the product source had

availability for the requested product by the number of times that a product source's

product related to an availability request to thereby determine a hit ratio; comparing the

hit ratio to a hit ratio threshold; and updating the availability information stored in the

storage device for product sources, wherein said updating step increases the number of

times availability information is updated for a product source having a hit ratio that is

less than or equal to the hit ratio threshold. However, Megiddo et al discloses that a hit

ratio is determined and the information in the storage device is updated based on a hit

threshold [0042-0046; 0059; 0093]. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to modify the invention of Fay et al to

include the method disclosed by Megiddo et al. Megiddo et al provides the motivation

that using a information replacement method for updating files helps to maximize the hit

ratio while minimizing the memory overhead [0005].

As per **claims 87 and 89**, Fay et al fails to disclose wherein said updating step decreases the number of times availability information is updated for a product source having a hit ratio that is at least as great as the hit ratio threshold. However, Megiddo et al discloses that the frequency of updates is lower for information with a greater hit ratio [0093-0097]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Fay et al to include the method disclosed by Megiddo et al. Megiddo et al provides the motivation that using a information replacement method for updating files helps to maximize the hit ratio while minimizing the memory overhead [0005].

Conclusion

<u>Examiner's Note:</u> Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shannon S. Saliard whose telephone number is 571-272-5587. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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Shannon S Saliard
Examiner
Art Unit 3639

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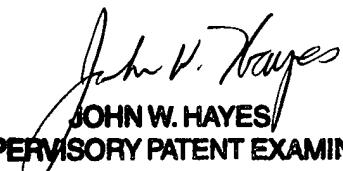
JOHN W. HAYES
SUPERVISORY PATENT EXAMINER